

## **Congenital heart disease in diabetic mother's infants: echocardiographic study**

### **Introduction and aims**

Congenital disease has seen in 0.5-0.8 percent of live births. Congenital heart disease is discussed as first leading cause of death in patients with congenital heart defect. This study was performed with the aim of diagnosis the congenital heart disease in infants of diabetic mothers and importance of early detection of diabetes in women who are in childbearing age or pregnant.

### **Materials and Methods**

Current descriptive analytical cross-sectional study carried out on infants born from diabetic mothers. In this study, infants were divided according to maternal diabetes and birth weight. Then infants underwent echocardiography. After recording information, data were categorized and after performing echo within a month maximum after birth and determined the result thus obtained data were analyzed.

### **Results**

In this study, the data from 40 infants of diabetic mothers were examined. The mean age of the mothers was 33.70 years that 62.5% were with gestational and diabetes mellitus. In prenatal history of infants were observed that 52.5% were girl and 87.5% were obtained from cesarean delivery. In evaluation of anthropometric measures of infants was also observed that their average weight was 3.47 kg, height 46.66 cm and head circumference 34.11cm. After examining gestational age was observed that 47.5% of them were preterm. In cardiac examination of infants was found that 27.5% were with a heart murmur and 25% with abnormal echocardiographic and ASD diagnosis was the most prevalence. Echo of infants with the type of mother diabetes ( $p=0.346$ ), weight ( $p=0.061$ ), height ( $p=0.227$ ), head circumference ( $p=0.037$ ), gestational age ( $p=0.039$ ), gender ( $p=0.201$ ) and family history of diabetes ( $p=0.090$ ) were analyzed.

### **Conclusion**

The results of this study showed that the high prevalence of heart disease in infants of diabetic mothers is most common among infants with ASD diagnosis.

**Key Words:** Congenital heart disease, infants of diabetic mothers, echocardiography.